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Bibliography of Recent Papers

D. Davies

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In preparation for the forthcoming meeting of the Commission for Agricultural Meteorology of the World Meteorological Organization a list of scientific papers written in recent years by the staff of the UK Meteorological Office has been compiled for international circulation within the Commission.

Two further major contributions to the Technical Note Series of WMO, are not yet published (and therefore omitted), namely

Weather and Animal Disease -- L.P. Smith

Protection against adverse weather - G.W. Hurst and R.P. Rumney

Enquiries regarding these papers should be addressed to Meteorological Office, Met O 8a at Bracknell, Berkshire.

Bracknell
May 1970

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## Scientific Books and Papers Published by Members of the Agricultural Meteorology Unit of the British Meteorological Office in Recent Years

1. Books and Papers

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| 1. | G. W. HURST | 1966 | Biometeorological Conference in the Lebanon, April 1966. Met. Mag., London, 95, p. 218-220. |
| 2. | C. V. SMITH | 1966 | First International Symposium on Methods in Agroclimatology, Reading, July 1966. Met Mag., London, 95, p. 376-379. |
| 3. | W. McKAY | 1967 | Symposium on Agricultural Meteorology, Abersystwyth, March 1967. Met Mag., London, 96, p. 219-221. |
| 4. | L. P. SMITH | 1967 | The World Weather Watch and meteorological service to agriculture. WMO, Geneva. World Weather Watch Planning Report No. 22. 28 pp. |
| 5. | L. P. SMITH (editor) | 1968 | Agroclimatolcgical Methods. Proc. of Reading 1966 Symposium. Unesco, Paris. Natural Resources Research VII. 392 pp. |
| 6. | R. W. GLOYNE | 1968 | Final Report on Agriculutral Meteorology in Turkey. WMO, Geneva. TC 6. p.1-44. |
| 7. | L. P. SMITH | 1968 | Seasonable Weather. Geo. Allen & Unwin Ltd., London. 145 pp. |

2. Climatic Factors

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| 8. | R. W. GLOYNE | 1966 | Some features of the climate of the immediate area served by the Forth & Tay road bridges. Scot. Geog. J., Edinburgh, 82, p. 111-118. |
| 9. | G. W. HURST | 1966 | Physical limitations to crop growth. Met Mag., London, 95, p. 178-181. |
| 10. | W. H. HOGG | 1966 | Early crop production. Agriculture, London, 73, p. 312-313. |
| 11. | W. H. HOGG | 1966 | Meteorological factors in early crop production. Symp. No. XI, Aberystwyth, March 1966. Geog. Dept. Univ. Coll. Wales p. 1-11. |
| 12. | W. H. HOGG | 1967 | Meteorological factors in early crop production. Weather, London. XXII (3), p. 84-94 and p. 115-118. |

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13. W. H. HOGG 1967 — The effect of a severe storm on 17 May, 1955 on a bean crop in Hampshire. Weather & Agriculture, Pergamon Press. p. 91-98.

14. W. H. HOGG 1968 — The cost of weather. Agriculture, London, 75, p. 518-521.

15. W. H. HOGG 1968 — Climate & surveys of agricultural land use. Nat. Resources. Res, VII UNESCO. p. 281-289.

16. W. H. HOGG 1968 — General aspects of mesoclimate and the criteria for selecting topics. WMO. Proc. Reg. Training Seminar, Wageningen, May 1968. p. 235-242.

17. W. H. HOGG 1968 — Possibilities for the future: the place of mesoclimate in general surveys of agriculture and horticulture. ibid p. 395-403.

18. R. W. GLOYNE 1969 — Some climatic influences affecting hill-land productivity. Proc. Symp. on Hill-Land Productivity, European Grassland Federation, July 1968. p. 1-7.

19. G. W. HURST 1969 — The variability with time and location of spring and summer temperatures in the United Kingdom. Met Mag., London, 98, p. 78-87.

20. W. H. HOGG 1970 — Basic frost, irrigation and degree day data for planning purposes. Weather Economics, Pergamon Press. p. 27-43.


3. Observations


21. R. W. GLOYNE 1965 — A method for calculating the incidence of the direct beam of the sun on a plane surface of any slope and aspect. Agric. Meteorol. 2, p. 401-410.

22. R. W. GLOYNE with M. E. KYLES 1965 — Some empirical relationships covering the intensity of direct solar radiation. Met Mag., London, 94, p. 361-370.

23. C. V. SMITH 1967 — Airborne tracers in agricultural meteorology. Met Mag., London, 96, p. 150-155.


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24. W. H. HOGG 1968 Network planning, observations and instrumentation.
WMO, Proc. Rep. Training Seminar, Wageningen, May 1968. p. 275-285.

4. Shelter and Wind

25. R. W. GLOYNE 1965 Some meteorological aspects of shelter research.
Second Symp. Shelter Res., Edinburgh, Sept. 1964, M.A.F.F. London. p. 53-63.

26. W. H. HOGG 1965 Studies in horticultural shelter.
ibid p. 3-12.

27. W. H. HOGG 1966 A shelterbelt study - relative shelter, effective winds and maximum efficiency.
Agric. Meteorol. 2, p. 307-315.

28. R. W. GLOYNE 1967 Wind as a factor in hill climates.
Weather & Agriculture, Pergamon Press, p. 59-67.

29. R. W. GLOYNE 1968 The structure of the wind and its relevance to forestry.
Forestry Suppl., Univ. Press, Oxford. p. 7-19.

5. Frost

30. W. H. HOGG 1966 Air frost in Spring at Long Ashton.
Rep. Long Ashton Res. Stn. 1965. p. 290-298.

31. G. W. HURST 1966 Temperatures in the forest of Thetford Chase.
Met Mag., London, 95, p. 273-279.

32. W. H. HOGG 1967 Frost.
Agriculture, London, 74, P. 459-461.

33. W. H. HOGG 1967 Frost types and incidence: some horticultural and agricultural applications.
Mem. No. 10, Univ. Coll. Wales, Aberystwyth p. 57-59.

34. G. W. HURST 1967 Frost variation in Thetford Chase.
ibid p. 143-157.

35. G. W. HURST 1967 Further studies of minimum temperatures in the forest of Thetford Chase.
Met Mag., London, 96, p. 135-142.

36. W. H. HOGG 1968 The analysis of data with particular reference to frost surveys; suggestions on the expression of results in economic terms.
WMO, Proc. Reg. Training Seminar, Wageningen, May 1968, p. 343-350.

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37. J. COCHRANE 1969 — A relationship between minimum air temperatures and duration of frost in late spring. Met Mag., London, 98, p. 138-140

38. G. W. HURST 1969 — Studies of temperature in the forest of Thetford Chase, in spring 1967. Met Mag., London, 98, p.39-49.

6. Irrigation

39. W. H. HOGG 1967 — Atlas of long-term irrigation needs for England and Wales. M.A.F.F. London, 300 plates.

40. L. P. SMITH 1967 — Potential Transpiration. Tech. Bull. No. 16 MAFF, London, 77 pp.

41. W. H. HOGG 1969 — Estimates of long-term irrigation need Mem. No. 12 Univ. Coll of Wales, Aberystwyth p. 1-9.

42. W. H. HOGG 1969 — Water in Agriculture. Agriculture, London, 76, p. 380-382.

7. Pathology and Entomology

43. W. H. HOGG 1967 — The use of upper air data in relation to plant disease. Weather & Agriculture, Pergamon Press p. 115-127.

44. G. W. HURST with T. LEWIS 1967 — Take-off thresholds in Thysanoptera and the forecasting of migratory flight. Biometeorology, Vol 2, Part 1, Pergamon Press, p. 576-578.

45. L. P. SMITH with J. M. WALKER 1967 — Simplified weather criteria for potato blight infection periods. Plant Pathology. 15(3), p. 113-116.

46. G. W. HURST with J. M. HIRST 1967 — Long-distrance spore transport. Airborne Microbes, Symp. No. 17, Soc. gen. Microbiol., London, p. 307-344.

47. W. H. HOGG with J. M. HIRST and O. J. STEDMAN 1967 — Long-distance spore transport: methods of measurement, vertical spore profiles and the detection of immigrant spores. J. gen. Microbiol., Cambridge, 48, p. 329-355.

48. G. W. HURST with J. M. HIRST and O. J. STEDMAN 1967 — Long distance spore transport: vertical sections of spore clouds over the sea. ibid. p. 357-377.

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| 49. | G. W. HURST | 1968 | Insect migration.<br>WMO Proc. Reg. Training Seminar, Wageningen May 1968, p. 163-176. |
| 50. | W. H. HOGG with C. E. HOUNAM A. K. MALLIK and J. C. ZADOKS | 1969 | Meteorological factors affecting the epidemiology of wheat rusts.<br>WMO, Geneva, Tech Note No. 99, 143 pp. |
| 51. | G. W. HURST with R. A. FRENCH | 1969 | Moth migration in the British Isles in July 1968.<br>Ent. Gaz., 20, p. 37-44. |
| 52. | G. W. HURST | 1969 | Insect migrations to the British Isles.<br>Q. J. R. Met Soc., 95, p. 435-439. |
| 53. | G. W. HURST | 1969 | Meteorological aspects of insect migration.<br>Endeavour XXVIII, p. 77-81. |
| 54. | G. W. HURST with M. W. SHAW | 1969 | Minor immigration of the Diamond-back moth. Plutella Xylostella.<br>Agric. Meteorol. 6, p. 125-132. |
| 55. | G. W. HURST | 1969 | Shallot aphid in S. E. England.<br>Plant Pathology, 18, p. 82-86. |


8. Yields


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| 56. | L. P. SMITH | 1966 | Changes in distribution of milk production in England and Wales.<br>Outlook on Agric., London, 4, p. 302-309. |
| 57. | G. W. HURST | 1967 | Honey production and summer temperatures.<br>Met Mag., London, 96, p. 116-120. |
| 58. | L. P. SMITH | 1967 | The effect of weather on the growth of barley.<br>Field Crop Abstracts, 20, p. 273-278. |
| 59. | L. P. SMITH | 1968 | Effective transpiration: a meteorological parameter for grassland.<br>Nat. Resources Res. V. UNESCO, p. 429-433. |
| 60. | L. P. SMITH | 1968 | Forecasting annual milk yields.<br>Agric. Meteorol., 5, p. 209-214. |
| 61. | G. W. HURST | 1970 | Temperatures in high summer and honey production.<br>Met Mag., London, 99, p. 75-82. |


9. Livestock Meteorology


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| 62. | L. P. SMITH with C. B. OLLERENSHAW | 1966 | An empirical approach to forecasting the incidence of nematodiriasis over England and Wales.<br>Vet. Record., 79, p. 536-540. |


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63. R. W. GLOYNE 1967
A contribution on methods of investigating the effects of weather and climate on farm livestock under normal management in the British Isles.
Biometeorology Vol. 2, Part 1, Pergamon Press, p. 387-394.

64. L. P. SMITH with C. B. OLLERENSHAW 1967
Climate and disease.
Agriculture, London, 74, p. 256-260.

65. G. W. HURST 1968
Foot and mouth disease. The possibility of Continental sources of the virus in England and Wales in epidemics of October 1967 and several other years.
Vet.Record, 82, p. 610-614.

66. L. P. SMITH with M. E. HUGH JONES 1969
The weather factor in foot and mouth disease epidemics.
Nature, London, 223, p. 712-715.

67. L. P. SMITH with C. B. OLLERENSHAW 1969
Meteorological Factors and forecasts of Helminthic Disease.
Advances in Parasitology Vol. 7.
Academic Press, p. 283-326.

68. P. B. WRIGHT 1969
Effects of wind and precipitation on the spread of foot and mouth disease.
Weather, London, 24(b), p. 204-213.

69. L. P. SMITH with C. B. OLLERENSHAW 1970
The role of weather in animal disease problems.
The Veterinary Annual 1969, p. 286-296.

70. C. V. SMITH 1970
Meteorological observations in Animal Experiments.
WMO, Geneva Tech. Note No. 107. 37 pp.


10. Miscellaneous


71. L. P. SMITH 1966
Agriculture and Climate.
Nature, London, 211, p. 1117-1119.

72. C. V. SMITH 1967
Weather and Agriculture.
Agriculture, London, 74, p. 559-562.

73. L. P. SMITH 1967
Meteorology and the Pattern of British Grassland Farming.
Agric. Meteorol., 3, p. 113-139.

74. L. P. SMITH 1967
Meteorology applied to agriculture.
WMO, Bull., Geneva, 16, p. 190-194.

75. C. V. SMITH 1969
Meteorology and grain storage.
WMO Tech. Note No. 101, 65 pp.


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| 76. | C. V. SMITH | 1970 | Weather and machinery work days. Mem No. 11, Univ. Coll. of Wales, Aberystwyth, p. 17-26. |
| 77. | L. P. SMITH (editor) | 1964 to date | Recently Published Papers - bibliographies published in each issue of Agricultural Meteorology, Elsevier Publ. Co. Amsterdam. |


Note 1: Owing to large demands, very few reprints are available. Photocopies could be supplied for the more important of these papers, if members are unable to consult the originals through their own library facilities.

2: This list includes only the work of Meteorological Office staff; the list of UK publications would be far longer, but all are included in the bibliographies contained in "Agricultural Meteorology".